



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/762,408 | 07/09/2001 | Jurgen Pandel | 55,595 (4510 | 3879 |

21874 7590 02/14/2005

EDWARDS & ANGELL, LLP
P.O. BOX 55874
BOSTON, MA 02205

| |
|----------|
| EXAMINER |
|----------|

LEE, Y YOUNG

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2613

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/762,408 | Applicant(s) PANDEL ET AL. | |
| | Examiner Y. Lee | Art Unit 2613 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/1/05 has been entered.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings were received on 7/7/04. These drawings are acceptable.

Claim Objections

4. Claims 11 and 16 are objected to because of the following informalities: Both claims, line 20, "second" (last occurrence) should be changed to --first--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Connell et al (5,537,155) for the same reasons as set forth in Section 9 of the previous office action, dated 4/7/04.

O'Connell et al, in Figures 1-4, discloses the same arrangement and method for estimating motion in a digitized video image sequence having pixels as specified in claims 11-20 of the present invention, comprising grouping pixels in picture blocks (400-404), in which the pixels are grouped to form at least one first picture area 303 and one second picture area 304; wherein first motion estimation is carried out in a first search area for at least one picture block 400 in the first picture area 303 to determine a first motion vector whereby movement of the first picture block 400 is described in comparison to the first picture block in a preceding predecessor picture 301; wherein second motion estimation is carried out in a second search area for at least one second picture block 402 in the second search area 305 to determine a second motion vector whereby movement of the second picture block 402 is described in comparison to the second picture block in a preceding predecessor picture 301; wherein the first search area 400 and the second search area 402 are of different sizes; and wherein the size of the second search area 402 is varied as a function of a predetermined picture quality (e.g. 103, 113, MV density, etc.), hereby the first picture block 400 or the second picture block 402 is coded 112 such that if the picture quality of the first picture block 303 is higher than the picture quality of the second picture block 304, then the size of the first search area 400 is larger than the size of the second search area 401 whereas if the picture quality of the first picture block 305 is lower than the picture quality of the second

picture block 303, then the size of the first search area 404 is smaller than the size of the second search area 400.

With respect to claims 12-15 and 17-20, O'Connell et al also discloses the size of the first search area 303 or the second search area 305 is varied as a function of a quantization parameter 103 whereby the first picture block 400 or the second picture block 402 is quantized 302; wherein variable length coding 104 of the motion vectors 110 is carried out; and a number of stored, different tables (e.g. variable length codes for I/P coding) are matched to the maximum length (e.g. step widths) of the motion vectors 110, in which codes for variable length coding 104 are stored, are used for variable length coding 104.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584.

The examiner can normally be reached on (703) 308-7584.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Y. Lee
Primary Examiner
Art Unit 2613

yl